

CHAPTER 7

SECTION 7 BRUCELLOSIS TESTING PROGRAM

7.7.1 PURPOSE

The brucellosis health monitoring program is mandatory and provides educational information concerning the disease and will assist in the prevention of brucellosis for APHIS employees.

7.7.2 GENERAL

Brucellosis is a contagious, bacterial disease of cattle, swine, sheep, goats, and dogs which can be infectious for humans. The disease in humans is commonly called undulant fever. Brucellosis is contracted by contact with discharges from infected animals, contact with carcasses at slaughter, and ingestion of raw milk, or other unpasteurized dairy products from infected animals.

Because of the variations in the signs or symptoms of this disease, it is almost impossible to describe all the forms it may assume. The incubation period ranges from a few days to a few months, averaging between 8 and 30 days. The onset may be abrupt with chills and fever or develop slowly with few or no symptoms. With prompt diagnosis and treatment, the length of infection can be shortened and complications prevented.

Additional information can be obtained from the APHIS Hazard Communication Employee Handbook on brucellosis.

7.7.3 RESPONSIBILITY FOR ESTABLISHING THE PROGRAM

The responsibility for establishing and maintaining the brucellosis health monitoring program in the field will be with the Occupational Medical Monitoring Program Coordinator (OMMPC) as delegated by the senior line manager and referenced in Sections 7.2.3 and 7.2.6.

7.7.4 HEALTH MONITORING PROGRAM

Diagnosis of brucellosis in humans can be made by serologic tests in most cases. For best interpretations a battery of tests should be utilized. A serological monitoring program will be established for employees having the potential of being exposed to brucellosis. A preexposure serum sample will be taken as soon as possible from each employee to establish a serological baseline. All future serological tests will be accomplished on a voluntary basis; however, it is recommended that employees be tested every 6 months if they have the potential of being exposed because of their involvement in the Brucellosis Eradication Program.

APHIS Form 29, Supervisor's Request for Health Monitoring, will be used in conjunction with all serum testing as outlined in Section 3.

If possible, employees should use U.S. Military, U.S. Public Health Service, Veterans' Affairs, and other Federal, county, or municipal health units to have blood samples collected and prepared for

shipment. Employees may use private physicians when such health units do not exist. The Marshfield Clinic will do the testing of all serum samples. See Section 3 for specific instructions.

Any employee who develops clinical signs of brucellosis and has a history of exposure will immediately notify his/her supervisor who will authorize a serological test for brucellosis utilizing APHIS Form 29.

All employees having a fever of unknown origin lasting more than 3 days, and having possible exposure to brucellosis, should be appropriately evaluated, including serology and blood culture.

Serological testing for brucellosis is not an effective method of case detection unless it is accomplished on a routine basis (every 2 months), and will not be looked upon as a substitute for a program of actively educating employees and supervisors in how brucellosis is acquired, its symptoms, and the need for prompt diagnosis and therapy. Posters describing the disease and where to go for diagnosis and treatment will be permanently placed on bulletin boards in locations where employees are likely to read them. Periodic mailed reminders are advisable for those employees that do not have access to bulletin boards.

7.7.5 PERSONAL PROTECTIVE EQUIPMENT

It is recommended that respirators with at least an N95 filter rating, goggles, antiseptic soaps, and surgical gloves be used in the prevention of brucellosis. All of this equipment should be available when requested by the employee.

7.7.6 OTHER PRECAUTIONS

The ultimate control of brucellosis in humans rests with the elimination of the disease from the animal population. There are, however, certain precautions which can be taken to minimize the risks associated with exposure:

Prevention of cuts and the contamination of cuts (hand washing, prompt first aid, etc.).

Avoidance of contamination of the eyes with body fluids of animals.

Provisions for adequate ventilation of working areas.

Avoidance of eating in any area where contamination of food by brucella organisms could occur.

Avoidance of undue contact with tissues most likely to be infected.

Prompt medical evaluations of any febrile illness. Possible exposure to brucella organisms should be specifically stated to the physician.

Proper use of animal inoculation procedures when using strain 19 vaccine.

Proper microbial hoods when performing viability tests or isolating brucella organisms in the laboratory.

7.7.7 MONITORING, REVIEWING, AND RECORDKEEPING RESPONSIBILITIES

7.7.7.1 Responsibilities of the Marshfield Clinic.

Analyze and interpret laboratory results of all samples received, as authorized by and with the consulting services of the USDA Medical Officer.

Make distribution of APHIS Form 29 as indicated in Section 3.

Notify by telephone, or fax, the OMMPC and SHES if sample results reflect a titer indicative of infection.

Maintain baseline sample for each employee.

7.7.7.2 Responsibilities of Supervisors.

Initiate requests for brucellosis serological testing using APHIS Form 29 as directed by their appropriate OMMPC.

Ensure that all protective devices are available and that safety and health precautions are adhered to by all employees.

Ensure that each employee (new and current) is notified periodically of the ramifications of contracting brucellosis.

Be especially alert for the symptoms of brucellosis in themselves and their employees.

Authorize the use of APHIS Form 29, so that the employee may be examined by a physician at APHIS expense, if brucellosis is suspected or clinical symptoms develop.

7.7.7.3 Responsibilities of the OMMPC.

Ensure that all employees who are exposed, or have the potential of being exposed to brucellosis, take a preexposure blood test as required in 7.7.4.

Keep a record of brucellosis tests for all their employees. This record will be compiled based upon information taken from Part 5 of APHIS Form 29, and will include names of employees, dates of tests, and test results. It is recommended that a graph record of all tests be made for each employee. Records will be maintained for a period of 5 years.

Conduct an investigation to determine the reasons for the contraction of brucellosis by any employee. Results of the investigation and actions taken should remain on file and available for APHIS safety and health reviews.

Have the ultimate responsibility to see that proper types and amounts of safety and health equipment are on hand to adequately perform the job functions without contracting brucellosis.